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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,008	06/24/2003	Kaiyo Nakajima	121027-195	1656
35684	7590	12/07/2005	EXAMINER	
BUTZEL LONG 350 SOUTH MAIN STREET SUITE 300 ANN ARBOR, MI 48104			GIBSON, KESHIA L	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,008

Applicant(s)

NAKAJIMA ET AL.

Examiner

Keshia Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/24/03, 4/26/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Definitions/Interpretations/Explanations

1. For purposes of this Office Action, based on the descriptions provided within applicant's disclosure, the term "stretch stress" has been interpreted to be equivalent to "elastic modulus" and "elongation stress." Support leading to such rationale can be found in excerpts Koshal (Manufacturing Engineer's Reference Book) and Cuillo et al. (The Rubber Formulary), both attached.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Open-type disposable wearing article having bifurcated stretchable zones.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the recitation "said wearing article having" in line 7 of the claim (page 30, line 9) is considered to be redundant; it is suggested this language be deleted. Appropriate correction is required.

4. Claim 7 is objected to because of the following informalities: the recitation "is formed by" is considered to be product-by-process limitation, it is suggested that is be changed to "is made from" or "comprises". Appropriate correction is required.

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5. Claim 9 is objected to because of the following informalities: it is suggested that "is" be added between "wearing article" and "used as a diaper cover" on line 2 of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-2, 6-7, and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gustafsson et al. (US 6,120,485).

In regard to Claims 1 and 6-7, Gustafsson et al. disclose an absorbent article having a front waist region, rear waist region, crotch region, first, second, and third stretchable zones, a first engaging means, and a first receiving means; the first and second stretchable zones are bifurcated at a transverse middle of the crotch region so as to extend into opposite lateral zones for the front and rear waist regions, respectively, and the first engaging and receiving means substantially connect the front and rear waist regions in opposite lateral zones (Figures, column 2, lines 1-45). Gustafsson et al. further disclose that the elastic material of the elastic pant comprises an elastic nonwoven fabric material (column 2, lines 1-7) and that the elastic pant is held snug in place against the body of the user but do not expressly disclose that the first and second stretchable zones having a higher stretch stress than the third stretchable zone. When the structure or composition recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions presumed to be inherent (MPEP 2112-2112.01). A prima facie case of either anticipation or obviousness has been established when the reference discloses all the limitations of a claim (in this case, bifurcated stretchable zones and a third stretchable zone extending into lateral zones of the front and rear waist regions) except for a property or function (in the present case, the first and second zones having a higher stretch stress than the third stretchable zone) and the examiner can not determine whether or not the

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reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to applicant, as per *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

In regard to Claim 2, the first and second stretchable zones are contiguous with each other (Figs).

In regard to Claim 9, the article is a diaper cover used with an absorbent pad 6 (column 2, lines 1-33). It is further noted that the language of the claim is considered to recite intended use. It has been held that a recitation with respect to the manner in which a claimed invention is intended to be employed does not differentiate the claimed invention from a prior art satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). *In re Paulsen*, 30 F.3d 1475, 31 USPQ 2d 1671 (Fed. Cir. 1994). Additionally, it has been held that a recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

10. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafsson et al.

In regard to Claim 3, Gustafsson et al. disclose that the front and rear waist regions are connected at a first engaging and a first receiving means (Fig. 3), but do not expressly disclose that the means comprise hook-and-loop-type fasteners. However, hook-and-loop-type fasteners are known in the art for use as fastening (i.e., engaging and

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receiving) together the front and rear waist regions of absorbent articles. Thus, it would have been obvious to one of ordinary skill in the art to select hook-and-loop-type fasteners as the engaging and receiving means, since it has been held within the skill of a worker of ordinary skill in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regard to Claim 8, Gustafsson et al. disclose that the elastic pant that has a bifurcated elastic and fits snugly against the wearer but do not expressly disclose that the stretchable zones exhibit specific ranges of stretch stress. However, stretch stress exhibited by the zones affects the article ability to fit snugly against the wearer. As such, the stretch stress of the stretchable zones is considered to be a result effective variable(s). Thus, it would have been obvious to one of ordinary skill in the art to have the stretchable zones exhibit a specific range of stretch stress, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

11. Claims 1-2 and 9 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fernfors (US 6,179,820).

In regard to Claim 1, Fernfors discloses an absorbent article having a front waist region, rear waist region, crotch region, first, second, and third stretchable zones, a first engaging means, and a first receiving means; the first and second stretchable zones are bifurcated at a transverse middle of the crotch region so as to extend into opposite

lateral zones for the front and rear waist regions, respectively, and the first engaging and receiving means substantially connect the front and rear waist regions in opposite lateral zones (Figures, column 2, lines 42-column 5, line 33; column 7, line 49-column 9, line 67). Fernfors further discloses that the elastic elements may be attached at different tensions and that the article is to fit comfortably yet tight enough to prevent leakage (column 2, lines 50-59, column 10, lines 5-13) but do not expressly disclose that the first and second stretchable zones having a higher stretch stress than the third stretchable zone. When the structure or composition recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions presumed to be inherent (MPEP 2112-2112.01). A prima facie case of either anticipation or obviousness has been established when the reference discloses all the limitations of a claim (in this case, bifurcated stretchable zones and a third stretchable zone extending into lateral zones of the front and rear waist regions) except for a property or function (in the present case, the first and second zones having a higher stretch stress than the third stretchable zone) and the examiner can not determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to applicant, as per *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

In regard to Claim 2, the first and second stretchable zones are contiguous with each other (Figs).

In regard to Claim 9, the article is a diaper cover used with an absorbent pad 9. It is further noted that the language of the claim is considered to recite intended use. It has

been held that a recitation with respect to the manner in which a claimed invention is intended to be employed does not differentiate the claimed invention from a prior art satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). *In re Paulsen*, 30 F.3d 1475, 31 USPQ 2d 1671 (Fed. Cir. 1994). Additionally, it has been held that a recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

12. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernfors.

In regard to Claim 3, Fernfors discloses that the front and rear waist regions are connected to each other (column 6, line 60-column 7, line 10), but do not expressly disclose that the connecting means comprise hook-and-loop-type fasteners. However, hook-and-loop-type fasteners are known in the art for use as connecting (i.e., engaging and receiving) together the front and rear waist regions of absorbent articles. Thus, it would have been obvious to one of ordinary skill in the art to select hook-and-loop-type fasteners as the engaging and receiving means, since it has been held within the skill of a worker of ordinary skill in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regard to Claim 8, Fernfors discloses that the elastic pant that has a bifurcated elastic and fits tightly to prevent leakage but do not expressly disclose that the stretchable

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zones exhibit specific ranges of stretch stress. However, stretch stress exhibited by the zones affects the article ability to fit tightly against the wearer. As such, the stretch stress of the stretchable zones is considered to be a result effective variable(s). Thus, it would have been obvious to one of ordinary skill in the art to have the stretchable zones exhibit a specific range of stretch stress, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

13. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. A search of the prior art of record failed to disclose any references, which taken alone or in combination, teach or fairly suggest an absorbent article having bifurcated stretchable zones and further comprising two sets of fasteners connecting the front and rear waist regions, wherein each set of fasteners lie in different stretchable zones from each other.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Jones et al. (US 4,355,425), Igaue et al. (US 5,188,627), Kling

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(US 5,817,086), Johnasson (US 5,855,573), Kumasaka (US 6,482,195), Shimoe (US 2001/0025165).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keshia Gibson whose telephone number is (571) 272-7136. The examiner can normally be reached on M-F 8:30 a.m. - 6 p.m., out every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Keshia Gibson
Examiner
Art Unit 3761

klg 11/29/05

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER
